NEWS WWW   CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

    * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 17:00:54 ON 03 MAR 2004

=> file agricola biosis embase caplus
COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                     ENTRY   SESSION
FULL ESTIMATED COST   0.21   0.21

FILE 'AGRICOLA' ENTERED AT 17:01:06 ON 03 MAR 2004

FILE 'BIOSIS' ENTERED AT 17:01:06 ON 03 MAR 2004
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=> s hemoglobin and seeds? and breeding
L1   2 HEMOGLOBIN AND SEEDS? AND BREEDING

=> d l1 1-2

L1   ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN   2000:15341 CAPLUS
DN   132:60124
TI   Nonsymbiotic plant   ***hemoglobins***   to maintain cell energy status in
      transgenic systems
IN   Guy, Phillip; Duff, Stephen; Xianzhou, Nie; Hill, Robert; Durnin, Douglas;
      Sowa, Aleksander
PA   University of Manitoba, Can.
SO   PCT Int. Appl., 44 pp.
      CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
      PATENT NO.   KIND   DATE   APPLICATION NO.   DATE
      ---------------   ----   --------   ---------------- --------
PI   WO 2000000597   A2   20000106   WO 1999-CA587   19990624
      WO 2000000597   A3   20000323
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
               DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

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=> s hemoglobin and seeds? and selection
L2              1 HEMOGLOBIN AND SEEDS? AND SELECTION

=> d l2 1

L2    ANSWER 1 OF 1  EMBASE  COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
      on STN
AN    94324312   EMBASE
DN    1994324312
TI    Trace element nutrition during pregnancy.
AU    Wada L.; King J.C.
CS    Department of Nutritional Sciences, College of Natural Resources,
      University of California,Berkeley, CA 94720, United States
SO    Clinical Obstetrics and Gynecology, (1994) 37/3 (574-586).
      ISSN: 0009-9201  CODEN: COGYAK
CY    United States
DT    Journal; Conference Article
FS    010     Obstetrics and Gynecology
      017     Public Health, Social Medicine and Epidemiology
LA    English
SL    English


=> d l2 1 ab

L2    ANSWER 1 OF 1  EMBASE  COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
      on STN
AB    The best means to ensure an optimal intake of trace elements during
      pregnancy is the consumption of a well-balanced diet that includes both
      animal- and plant-food sources. Although vegetarian diets provide
      reasonable sources of trace elements, especially in dried beans and
       ***seeds***   , flesh foods contain higher concentrations of trace
elements
      that are in a more readily absorbable form. Iron is the only trace element
      for which routine supplementation is recommended. In the United States,
      the iodine content of the food supply is sufficiently high to make
      supplementation unnecessary, but use of iodized salt is not
      contraindicated. There is no need to screen pregnant women routinely for
      trace element status, except to monitor   ***hemoglobin***   and
      hematocrit as an indicator of iron status. The best indicators that a
      woman's trace element status may be at risk is a history of poor food
       ***selections***   , a clinical disorder that alters trace element use or
      excretion, or prior residence in a region of the world where the trace
      element content of the soil is low.


=> s hemoglobin and seed? and selection
L3             10 HEMOGLOBIN AND SEED? AND SELECTION

=> duplicate remove l3
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L3
L4              8 DUPLICATE REMOVE L3 (2 DUPLICATES REMOVED)
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While the   ***seed***   and the pollen carry species characters, they
also transmit certain obscure properties which are peculiar to each of the
sex elements; this was shown by differences in the offspring of reciprocal
crosses. The germplasm is recognized as a stereochem. system. Such
phenomena as sports, reversion, variation, and the genesis of strains,
subspecies, and species are due to gradual and progressive changes and
ultimate fixation; hybridization is probably the chief method in the
genesis of species.

=> s selection and seed and nonsymbiotic and hemoglobin
L5   0 SELECTION AND SEED AND NONSYMBIOTIC AND HEMOGLOBIN

=>
=> seed(w)selection and breeding
SEED(W)SELECTION IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s seed(w)selection and breeding
L6   52 SEED(W) SELECTION AND BREEDING

=> duplicate remove l6
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L6
L7   49 DUPLICATE REMOVE L6 (3 DUPLICATES REMOVED)

=> d l7 1-10 ti

L7   ANSWER 1 OF 49 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI   Selection for large seed and high protein in two- and three-parent soybean
     populations.

L7   ANSWER 2 OF 49 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
     DUPLICATE 1
TI   Genetic effects on grain shape traits of indica black pericarp rice and
     their genetic correlations with main mineral element contents in grains.

L7   ANSWER 3 OF 49 CAPLUS COPYRIGHT 2004 ACS on STN
TI   System for functional gene discovery in plants using multigeneration
        breeding   with database tracking of phenotypes

L7   ANSWER 4 OF 49 CAPLUS COPYRIGHT 2004 ACS on STN
TI   Non-random selection of livestock and crops and tissue products in
        breeding   for uniformity using phenomics and bioinformatics

L7   ANSWER 5 OF 49 CAPLUS COPYRIGHT 2004 ACS on STN
TI   Selection for high seed oil content in soybean families derived from
     plants regenerated from protoplasts and tissue cultures

L7   ANSWER 6 OF 49 CAPLUS COPYRIGHT 2004 ACS on STN
TI   Selection of soybean mutants with increased concentrations of seed
     methionine and cysteine

L7   ANSWER 7 OF 49 CAPLUS COPYRIGHT 2004 ACS on STN

cultivar Idared, through parthenogenesis in situ.
```
AU    De Witte, Krista; Keulemans, Johan
CS    Fruitteeltcentrum K.U. Leuven, Willem de Croylaan 42, B-30001
      Leuven-Heverlee, Belgium
SO    Euphytica, (1994) Vol. 77, No. 1-2, pp. 141-146.
      CODEN: EUPHAA. ISSN: 0014-2336.
DT    Article
LA    English
ED    Entered STN: 25 Jan 1995
      Last Updated on STN: 25 Jan 1995
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=> FIL STNGUIDE
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	93.91	94.12

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.08	-2.08

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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 27, 2004 (20040227/UP).

=> s single(w)seed(w)descent
           221 SINGLE
             0 SEED
             0 DESCENT
L8           0 SINGLE(W)SEED(W)DESCENT

=> file agricola biosis embase caplus
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.12	94.24

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-2.08

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FILE 'AGRICOLA' ENTERED AT 17:31:22 ON 03 MAR 2004

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AB   This paper reviews some measurements of representativeness such as the
      effective population size (Ne) useful in genetic resources conservation
      and plant breeding research. Some easy-to-use expressions for estimating
      Ne in a number of practical conditions are given. For the case of several
      subpopulations, Ne is scarcely influenced by the total inbreeding. Thus,
      Ne becomes mostly dependent on the allelic diversity among subpopulations
      and the number of subpopulations sampled. When, under natural conditions,
      levels of interpopulation allelic divergence are low, it is misleading to
      believe that a small number of subpopulations will be sufficient to attain
      adequate effective population sizes. When a single population is
      considered and seeds being sampled have a family structure, at the limit
      Ne depends only on the number of seed parents and the coancestry
      coefficient among sibs within families. Accession regeneration is the
      case where the reference population is of finite size. Gametic control is
      a major factor in regeneration. The loss of up to 20% of seeds may be
      recovered in terms of Ne when female gametic control is applied. This is
      not attainable with random sampling of seeds. When studying Ne in
      recurrent selection schemes, results showed that the gain in Ne through
      gametic control is very small when selection is intensive. When comparing
      effective population sizes for the   ***single***   ***seed***
        descent   . (SSD) method versus the bulk system, results showed that
      SSD maintains genetic drift at a low level and offers a much better
      protection against random loss of alleles during selfing generations.
      Estimating population parameters, through codominant genetic markers is
      fundamental for obtaining reliable estimates of effective population size.

=> s single(w)seed(w)descent and selection and trait and breeding
L11   52 SINGLE(W) SEED(W) DESCENT AND SELECTION AND TRAIT AND BREEDING

=> duplicate remove l11
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n

PROCESSING COMPLETED FOR L11
L12   38 DUPLICATE REMOVE L11 (14 DUPLICATES REMOVED)

=> d l12 1-15

L12   ANSWER 1 OF 38   BIOSIS   COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
      DUPLICATE 1
AN   2003:578040   BIOSIS
DN   PREV200300582830
TI   Mapping QTL for   ***traits***   associated with resistance to ferrous
      iron toxicity in rice (Oryza sativa L.), using japonica chromosome segment
      substitution lines.
AU   Wan Jian-Lin [Reprint Author]; Zhai Hu-Qu; Wan Jian-Min [Reprint Author];
      Yasui, Hideshi; Yoshimura, Atsushi
CS   State Key laboratory of Crop Genetics and Germplasm Enhancement, Jiangsu
      Plant Gene Engineering Research Center, Nanjing Agricultural University,
      Nanjing, 210095, China
      wanjm@mail.njau.edu.cn
SO   Acta Genetica Sinica, (Oct 2003) Vol. 30, No. 10, pp. 893-898. print.
      ISSN: 0379-4172 (ISSN print).
DT   Article

SSD, 34.5% of the original population was lost due to barrenness at the high density in 1 cross and 26.5% in the other. Seed of surviving genotypes was increased for a replicated field trial where maturity (days after 1 June), plant height (cm) oil content (NMR value), and grain yield (g/hill plot) were measured. Means and variances between progenies advanced under high or low densities generally did not differ for any of the ***traits*** , leading to the conclusion that the genotypes eliminated due to barren plants were randomly and not selectively eliminated due to ***selection*** pressures of the technique.

L12 ANSWER 38 OF 38 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AB   Heredity of a few ***traits*** relevant to plant development and assimilation area was studied in Toulouse, France, in 2 independent non-selected hybrid populations segregating in F3 and F4. Both generations were grown related to each other, as well as to the initial F2, by ***single***   ***seed***   ***descent*** . The F4 material was also analyzed on a plant mean basis in 2 replicated rows at normal planting density. For both populations as isolated plants, heritability values were consistently high (0.32-0.70) for leaf area and earliness. They were low (< 1) for 2nd development phase duration and weight per seed. The 2 populations did not differ much from each other, except for the heritability size of the various characters. When the F4 was grown under conditions of plant competition, the heritability values remained roughly the same, but for the number of pods per plant it slightly decreased. The expected genetic progress resulting, at normal density, from a ***selection*** performed among spaced plants, showed more spread differences between characters, with total similarity between both families. The more responsive ***trait*** was leaf area, followed by yield. Although the 2 characters are positively correlated, it is possible to associate, in a ***breeding*** program, an improved yield with a moderate leaf area, that is recommendable in the climatic conditions of France.

=> s l12 and protein
L13   4 L12 AND PROTEIN

=> d l13 1-4 ibib ab

L13 ANSWER 1 OF 4 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
ACCESSION NUMBER: 2000:31462 AGRICOLA
DOCUMENT NUMBER: IND22034394
TITLE: Agronomic performance of lines derived from anther culture, maize pollination and ***single*** -
                           seed   ***descent*** in a spring wheat cross.
AUTHOR(S):   Ma, H.; Busch, R.H.; Riera-Lizarazu, O.; Rines, H.W.; Dill-Macky, R.
CORPORATE SOURCE: University of Minnesota, St. Paul, MN.
AVAILABILITY: DNAL (442.8 Z8)
SOURCE: Theoretical and applied genetics, Aug 1999. Vol. 99, No. 3/4. p. 432-436
                           Publisher: Berlin; Springer-Verlag
                           CODEN: THAGA6; ISSN: 0040-5752

Concomitant with our QTL identification and manipulation efforts are
several ongoing expts. based on functional genomics. We are convinced
that emerging technologies based on gene expression have the potential to
provide complementary information that will promote more efficient
germplasm improvement. Indeed, understanding the genetic basis of the
essential physiol. parameters of drought tolerance in maize, together with
the data generated by profiling expts., should allow the identification of
the key pathways involved in drought stress and further our understanding
of how they interact. This, in turn, will lead to develop strategies to
improve the tolerance of maize and other crops to water-limited
conditions.

REFERENCE COUNT: 38   THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> protein(w)content and seed and selection and breeding and plant
PROTEIN(W)CONTENT IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s protein(w)content and seed and selection and breeding and plant
L14   281 PROTEIN(W) CONTENT AND SEED AND SELECTION AND BREEDING AND PLANT

=> s l14 and barley
L15   17 L14 AND BARLEY

=> duplicate remove l15
DUPLICATE PREFERENCE IS 'BIOSIS, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L15
L16   17 DUPLICATE REMOVE L15 (0 DUPLICATES REMOVED)

=> d l16 1-10 ti

L16   ANSWER 1 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
TI   High protein phenotype-associated   ***plant***   genes and their use for
      generating transgenic   ***plants***   with improved nutritional
      properties

L16   ANSWER 2 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
TI   ***Barley***   malting quality and yield interrelationships and the
      effect on yield distribution of   ***selection***   for malting quality in
      the early generations

L16   ANSWER 3 OF 17 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI   A synthetic hexaploid (2n = 42) oat from the cross of Avena strigosa (2n =
      14) and domesticated A. magna (2n = 28).

L16   ANSWER 4 OF 17 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI   ***Protein***   ***content***   heritability in   ***selection***   of
       barley   based on intraplant variation in kernel anatomical
      structure.

L16   ANSWER 5 OF 17 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI   ***Selection***   of Dry pea (Pisum sativum) varieties and their
      performance by comparison with   ***barley***   and wheat in Mediterranean

```
      ***protein***      ***content***   .  However, some differences in
       ***protein***      ***content***    were significant, e.g. grains 11, 15,
   and 17 contained 12, 13-8, and 15.7% protein, resp.  Grains of the KM-1192
   cultivar and its F1 and F2 hybrids pollinated by Hyproly contained
   8.7-12.4, 9.3-11.0, and 6.9-12.4% protein, resp.  Thus, the variability
   increased in F2, whereas in F1 it resembled that of the mother cultivar.


=> single(w)trait(w)variablilty and protein and seed and barley and selection
SINGLE(W)TRAIT(W)VARIABLILTY IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).


=> s single(w)trait(w)variablilty and protein and seed and barley and selection
L17          0 SINGLE(W) TRAIT(W) VARIABLILTY AND PROTEIN AND SEED AND BARLEY
               AND SELECTION


=> s single(w)trait(w)variablilty and protein and seed and selection
L18          0 SINGLE(W) TRAIT(W) VARIABLILTY AND PROTEIN AND SEED AND SELECTIO
               N


=> s single(w)trait(w)variablilty and seed and selection
L19          0 SINGLE(W) TRAIT(W) VARIABLILTY AND SEED AND SELECTION


=> s single(w)trait(w)variability and seed and protein and selection
L20          0 SINGLE(W) TRAIT(W) VARIABILITY AND SEED AND PROTEIN AND SELECTIO
               N


=> s single(w)trait and seed and protein and selection
L21          1 SINGLE(W) TRAIT AND SEED AND PROTEIN AND SELECTION


=> d l21 ibib ab


L21  ANSWER 1 OF 1  BIOSIS  COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER:    1997:242957  BIOSIS
DOCUMENT NUMBER:     PREV199799542160
TITLE:                  ***Selection***   for yield,   ***protein***  , and oil
                     in soybean crosses between adapted and introduced parents.
AUTHOR(S):           Scott, Roy A. [Reprint author]; Kephart, Kevin D.
CORPORATE SOURCE:    Plant Sci. Dep., South Dakota State Univ., Box 2140C, NPB
                     247, Brookings, SD 57007, USA
SOURCE:              Field Crops Research, (1997) Vol. 49, No. 2-3, pp. 177-185.
                     ISSN: 0378-4290.
DOCUMENT TYPE:       Article
LANGUAGE:            English
ENTRY DATE:          Entered STN: 13 Jun 1997
                     Last Updated on STN: 13 Jun 1997
AB    Soybean (Glycine max (L.) Merr.) breeders can sometimes increase genetic
      variability in their germplasm through wide crosses with plant
      introduction (PI) material, and in that way lead to slow progress in
      developing high-yielding cultivars.  A study was conducted to evaluate the
      potential of crosses of adapted times introduced soybean lines for
      improving yield and  ***protein***  and oil concentrations.  Five
      soybean cultivars adapted to South Dakota were crossed in selected
      combinations with four PI lines to develop F-3-derived lines.  The adapted
      and PI lines were selected for wide variation in   ***protein***   and oil
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